[0094] HTTP Interface of the MMSC

[0095] The MMSC HTTP Server 134 accepts POST method requests (via the external Internet) encapsulating M-send.req messages (format shown in Table 3.0), which in turn encapsulate MIME multipart multimedia messages. See example 3.0.

[0096] The HTTP server 134, after receiving the MM, passes the MM to the MMS relay 122 for further processing.

[0097] The MMSC HTTP Server 134 returns POST response messages containing standard HTTP status codes and encapsulated M-send.conf messages.

[0098] The MMSC HTTP Server 134 accepts GET method requests (via the external Internet) containing the location of the MM to be retrieved. See Example 1.0.

[0099] The HTTP server 134 informs the MMS relay 122/MMS server 124 of the need to retrieve the indicated MM, after receiving the GET request.

[0100] The MMSC HTTP Server 134 sends GET responses encapsulating M-retrieve.conf messages (format as shown in Table 2.0) to the MMS UA 201, 202. Note that the m-retrieve.conf message contains the retrieved MM. See Example 2.0.

[0101] The MMS Relay HTTP Server 134 preferably supports persistent connections, and preferably includes connectivity to the external worldwide web for exchanging messages with the MMS UA 201, 202 through the wireless network 110.

[0102] SMTP Interface of the MMSC

[0103] Incoming Email

[0104] The MMS Relay SMTP Server 132 preferably supports an EHLO greeting response, but may not necessarily be required to support any specific extended SMTP commands in the EHLO response message.

[0105] The MMS Relay SMTP Server 132 supports SMTP for receiving MIME-encapsulated email content from external email servers. The MMS Relay SMTP Server 132 also maps the SMTP headers within incoming SMTP messages from external servers to the relevant MMS user agent interface message headers (See Table 8.0).

[0106] The MMS Relay SMTP Server 132 ignores SMTP headers within incoming external SMTP messages that are not necessary to populate MM1 message header fields sent to the MMS user agent.

TABLE 8.0

Email fields mapping to MM Fields	
Incoming Email Fields	MM Fields
N/A	X-mms-MessageType
From	From
Date	Date
To	To
Cc	Cc
Message text and attachments	Message Body
Content-type	Content-type
Subject	Subject

TABLE 8.0-continued

Email fields mapping to MM Fields	
Incoming Email Fields	MM Fields
N/A	Priority
Content-length (Octets)	X-Mms-Message-Size
N/A	X-Mms-Content-Location

EXAMPLE 6.0

[0107] SMTP SEND from an Email Originator to the MMS Relay SMTP Server destined for the MMS UA 4103036475

[Connection Initiation and Handshaking, Including 'Hello' (HELO) or

```
CLIENT - MAIL FROM: demo@yahoo.com
  SERVER - 250 OK
CLIENT - RCPT TO: 4103036475@mmsc.tcsnet.net
SERVER - 250 OK
  CLIENT - DATA
  SERVER - 354 Start Mail Input
  CLIENT -
  Date: Wed, 16 May 2001 10:35:00 +0800
  From: demo@yahoo.com
  To: 4103036475@mmsc.tcsnet.net
  Subject: World leaders
    MIME Version: 1.0
Content-transfer-encoding: 7bit
Content-Type: multipart/mixed;
boundary=asdlfkjiurwghasf;
    -- asdlfkjiurwghasf
    Content-Type: text/plain
  Here is my picture of George Bush
  -- asdlfkjiurwghasf
    Content-Type: image/jpeg
    0F 0F 01 01 3A 4B 0F 0F 01 01 3A 4B 0F 0F 01
    01 3A 4B 0F 0F 01 01 3A 4B 0F 0F 01 01 3A 4B
    0F 0F 01 01 3A 4B 0F 0F 01 01 3A 4B 4B 0F 0F
    01 01 3A 4B 0F 0F 01 01 4B 0F 0F 01 01 3A 4B
```

[0108] Outgoing Email

-- asdlfkjiurwghasf

SERVER - 250 OK CLIENT - QUIT

'Extended Hello' (EHLO)

[0109] The MMS Relay SMTP server 132 may support greeting external SMTP servers with the HELO command.

0F 0F 01 01 4B 0F 0F 01 01 3A 4B 0F 0F 01 01

4B 0F 0F 01 01 3A 4B 0F 0F 01 01 38.

SERVER - 221 Closing Transmission Channel

[0110] The MMS Relay SMTP Server 132 maps MMS user agent interface message headers directly to SMTP mandatory message headers when an MMS User Agent 201, 202 originates an MM to be delivered via SMTP (See Table 9.0).

[0111] The MMS Relay SMTP Server 132 includes the multimedia parts of the outgoing MM as attachments, and includes the text part of the outgoing MM as the text of the email.